FEI | Faith Engineering, Inc.

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December 8, 1999

Mr. David Nelson Environmental Health Scientist Bernalillo County Environmental Health Department 600 Second St. – Suite 500 Albuquerque, NM 87102

RE: Eight-Site Work Plan – Isleta Corridor Contract No. 980473

Dear David:

Pursuant to your request, please find included herewith two (2) copies of Faith Engineering, Inc.'s (FEI) Eight-Site Work Plan for the UST Sites on Isleta Boulevard SW. FEI has entered into a new subcontract agreement with Tecumseh Professional Associates (TPA) in order to maintain our teaming arrangement with Mr. Bill Brown (formerly of Leedshill Herkenhoff, Inc.). These eight sites have been investigated and in most cases have had active remediation systems installed. The time that has elapsed since these sites were investigated and had their respective remediation systems turned off (generally since 1996) will necessitate their re-investigation in order to assess the options for continued site cleanup. The need to re-assess these sites is the subject of these work plans.

With the exception of the Pit Stop (305 Isleta) and Lee and Blakely Feed Store (3031 Isleta), the other six sites have relied on soil vacuum extraction (SVE) or air sparge/vacuum extraction (AS/VE) remediation systems in the past with varying degrees of success. An optional task that has been proposed on five of the sites includes pilot testing of high flow SVE or AS/VE wells in order to evaluate this as a remedial alternative. It was brought to our attention yesterday that the NMED/USTB might be adopting a new policy of not approving SVE or AS/VE systems for the South Valley sites. This is due to the shallow ground water (which limits the vacuum that can be applied without concomitant increases in ground water production) and the silty/clayey nature of many of the soils in the South Valley (which limits vapor flow through these low permeability soils). As an alternative, the NMED/USTB is suggesting that source removal (dig and haul) may be more suitable for South Valley sites.

Although FEI does not disagree with NMED/USTB's new policy and has seen ample evidence of the limitations of SVE and AS/VE in this type of hydrogeologic environment, we also believe that these systems can be made more effective with proper design and operation. Additionally, the use of source removal as a remedial alternative is limited because at many sites, soil and ground water contamination extends under roadways, buildings, and utility right-of ways which, in turn, limits its effectiveness unless the roadway, buildings and utilities are also removed.

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This apparent dilemma suggests that another variant on the source removal scenario could be implemented during roadway and utility upgrades. That is, a plan in which source removal occurs during or slightly ahead of roadway construction could be implemented with appropriate coordination with the Bernalillo County Public Works Department. Such a scenario also suggests the necessity of some building condemnation and demolition, which may or may not be required under the present roadway/utility upgrade plans for the Isleta Corridor. In many of these situations, it may be appropriate to consider removal of only a portion of the contaminated material that could be exposed without building demolition so that roadway and utility construction could be made through clean backfill.

Another consideration, in the context of these work plans, would be to substitute the preparation of a source removal reclamation plan for the proposed optional SVE or AS/VE pilot testing. Such a reclamation plan would consider the feasibility of source excavation (percent contaminant removal, existing buildings, utilities, roadways, estimated contaminated soil disposal/backfill quantities and costs). FEI would reserve the right to modify the costs for such an optional reclamation plan preparation in-lieu of the pilot testing tasks proposed herein.

Obviously, this issue will need additional consideration and discussion with appropriate personnel at NMED/USTB and Bernalillo County prior to final decisions regarding these eight sites and others along the Isleta Corridor. We appreciate your patience in our preparation of these work plans. Bill Brown and I have devoted considerable time to evaluating these sites which has included: the review of old NMED/USTB case files, inspecting and mapping the sites, and evaluating previous monitoring and remediation system effectiveness.

Please be advised that proposed scope of work and budget for Task One of all 8 Work Plans, *Site Review and Work Plan Development*, has been approved by the NMED/USTB under a separate submittal. Budget details for all other tasks are included in each of the enclosed work plans. Please do not hesitate to contact the undersigned if you have any questions or comments.

Respectfully submitted, FAITH ENGINEERING, INC.

Stuart Faith, P.E. Certified Scientist No. 80

Enclosures

cc: Ms. Joyce Castro-Shearer - NMED/USTB